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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/706,623	11/12/2003	Sridhar Balasubramanian	03-1127	7990	
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LSI Logic Corporation Legal Department - IP MS D-106 1621 Barber Lane Milpitas, CA 95035			LEE, CHUN KUAN		
			ART UNIT	PAPER NUMBER	
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

	Application No.	Applicant(s)				
	10/706,623	BALASUBRAMANIAN ET AL.				
Office Action Summary	Examiner	Art Unit				
	Chun-Kuan (Mike) Lee	2181				
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply						
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication. - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication. - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).						
Status						
·= · ·	Responsive to communication(s) filed on <u>06 March 2007</u> .					
<i>,</i>	·					
3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.						
closed in accordance with the practice under Ex parte Quayre, 1933 C.D. 11, 433 C.G. 213.						
Disposition of Claims						
4)⊠ Claim(s) <u>1-20</u> is/are pending in the application.						
4a) Of the above claim(s) is/are withdrawn from consideration.						
5)⊠ Claim(s) <u>9-12</u> is/are allowed. 6)⊠ Claim(s) <u>1-6 and 13-18</u> is/are rejected.						
7)⊠ Claim(s) <u>7.8.19 and 20</u> is/are objected to.	•					
8) Claim(s) are subject to restriction and/o	r election requirement.					
Application Papers						
9) The specification is objected to by the Examiner.						
•	10)⊠ The drawing(s) filed on <u>12 November 2003</u> is/are: a)⊠ accepted or b)□ objected to by the Examiner. Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).					
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).						
11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.						
Priority under 35 U.S.C. § 119						
12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).						
a) ☐ All b) ☐ Some * c) ☐ None of: 1. ☐ Certified copies of the priority documents have been received.						
2. Certified copies of the priority documents have been received in Application No						
3. Copies of the certified copies of the priority documents have been received in this National Stage						
application from the International Bureau (PCT Rule 17.2(a)).						
* See the attached detailed Office action for a list of the certified copies not received.						
Attachment(s)						
1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)	4)					
3) Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date	5) Notice of Informal F 6) Other:					

DETAILED ACTION

CONTINUED EXAMINATION UNDER 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 03/06/2007 has been entered.

RESPONSE TO ARGUMENTS

- 2. Applicant's arguments with respect to claims 1-6 and 13-18 have been considered but are moot in view of the new ground(s) of rejection. Applicant's arguments, see pages 45-55, filed 03/06/2007, with respect to claims 9-12 have been fully considered and are persuasive. The rejection of claims 7-12 and 19-20 has been withdrawn. Currently, claims 1-20 are pending for examination.
- 3. In response to applicant's arguments, on page 30 last paragraph to page 31 1st paragraph, regarding the rejection of claims 2 and 14 under 35 U.S.C. 103(a) that <u>Farrand</u> is nonanalogous art, because <u>Farrand</u> is not in the field of applicant's endeavor as <u>Farrand</u> is in the field of management information bases; applicant's argument have fully been considered, but are not found to be persuasive.

<u>Farrand</u> is analogous art because <u>Farrand</u> is in the field of applicant's endeavor; as stated by the applicant in the remarks, <u>Farrand</u> is in the field of management information bases, wherein the computer is communicating with the disk storage system (e.g. disk subsystem) for managing by configuring the disk storage system (<u>Farrand</u>, Abstract)

4. In response to applicant's arguments, on page 33 to page 34 1st paragraph, regarding the rejection of claims 2 and 14under 35 U.S.C. 103(a) that the examiner is viewing <u>Farrand</u> too broadly to establish the that <u>Farrand</u> is in the field of applicant's endeavor, by citing *In re Oetiker*, applicant's argument have fully been considered, but are not found to be persuasive.

The examiner believe that the field as discussed in *In re Oetike* is much more distinct than the instant rejection, as the field disclosed by *In re Oetike* is between hose clamp and fasteners for garment. Where as in the instant application, both the applicant and <u>Farrand</u> are association with a computer system as a computer would be communicating with a disk storage system, wherein the difference is that applicant is concern with the problem associated with initialization of serial port and <u>Farrand</u> is concern with the problem associated with management information. Therefore, the applicant's and <u>Farrand</u>'s field of endeavor is not as distinctive in comparison to hose clamp and fasteners for garment.

5. In response to applicant's arguments, on page 36 last paragraph to page 37, regarding the rejection of claims 4 and 16 under 35 U.S.C. 103(a) that <u>Harrington</u> is nonanalogous art, because <u>Harrington</u> is not reasonable pertinent to the particular problem with which applicant were concerned; applicant's arguments have fully been considered, but are not found to be persuasive.

It appears to the examiner that the purpose that the applicant is implementing the claimed "authenticating" is to ensure a safe mode of operation (Specification, page 7, II.18-22), therefore, <u>Harrington</u>'s secret password and personal user name that needed to be entered before accessing the computer would be pertinent to the particular problem for providing a safe mode of operation, as the user must be authenticated by first entering the secret password and personal user name before gaining access.

6. In response to applicant's arguments, on page 38 last paragraph, regarding the rejection of claims 4 and 16 under 35 U.S.C. 103(a) that <u>Harrington</u> do not teach or suggest doing so (e.g. authenticating) before receiving the at least one serial port parameter value from the host device; applicant's arguments have fully been considered, but are not found to be persuasive.

By combining <u>Harrington</u> into <u>AAPA</u> as modified, it would be obvious that the entering of the secret password and personal user name would be done before receiving the at least one serial port parameter value from the host device, because if the secret password and personal user name were to be entered afterwards, the secret

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password and personal user name would not be able to provide the safe mode of operation as any user could have been able to gain access without authentication.

7. In response to applicant's arguments, on page 41 to page 45, regarding the rejection of claim 6 under 35 U.S.C. 103(a) that the combination of references do not teach the claimed "adaptive baud rate negotiation"; applicant's arguments have fully been considered, but are not found to be persuasive.

In view of applicant's disclosure and also the specification, there appears no specific disclosure that the claimed "adaptive baud rate negotiation is defied as ..."; furthermore, if the "adaptive baud rate negotiation is based on the return character received from a break character from the serial console," (Remarks, page 45, 3rd paragraph) then AAPA teaches receiving the break character invoked on the serial console (Specification, page 2, II. 28-29), and Walter teaches adaptively determining the correct baud rate by transferring and receiving characters such as 'A' or 'a' (col. 2, II. 49-52 and col. 6, II. 43-49); therefore, the resulting combination of the references would teach adaptively determining the correct baud rate (e.g. adaptive baud rate negotiation) by transferring and receiving the break character from the serial console.

I. INFORMATION CONCERNING OATH/DECLARATION

<u>Oath/Declaration</u>

8. The applicant's oath/declaration has been reviewed by the examiner and is found to conform to the requirements prescribed in **37 C.F.R. 1.63**.

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II. INFORMATION CONCERNING DRAWINGS

Drawings

9. The applicant's drawings submitted are acceptable for examination purposes.

III. <u>DISTINGUISHING FEATURES RECITED IN THE CLAIMS</u> ALLOWABLE SUBJECT MATTER

10. Claims 9-12 contain allowable subject matter.

The allowable subject matter of claim 9 in the instant application is the combination with the inclusion in the claim that there is "a method of performing an adaptive baud rate negotiation for serial port initialization in a storage controller comprising:

sending a break key sequence from the external device to the storage controller;

determining an amount of time between a start bit and a stop bit;

obtaining a baud rate based on the amount of time; and

sending a second baud rate for the serial port based on the first baud rate"

The prior art of record including the disclosures of <u>AAPA</u>, <u>Peters et al.</u> (US Patent 4,999,766) and <u>Krulce</u> (US Patent 6,072,827) neither anticipates nor renders obvious the above recited combination. Because claims 10-12 depend directly on claim 9, these

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claims are considered to contain allowable subject matter for at least the same reasons noted above.

11. Claims 7 and 19 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The allowable subject matter of claim 7 and 19 in the instant application is the combination with the inclusion in the claim that there is "... performing an adaptive baud rate negotiation ... sending a break key sequence from the external device to the storage controller; determining an amount of time between a start bit and a stop bit; and obtaining a baud rate based on the amount of time ... " The prior art of record including the disclosures of AAPA, Peters et al. (US Patent 4,999,766) and Walter et al. (US Patent 6,847,615) neither anticipates nor renders obvious the above recited combination. Because claims 8 and 20 depend directly or indirectly on claims 7 and 19, these claims are considered to contain allowable subject matter for at least the same reasons noted above.

IV. REJECTIONS BASED ON PRIOR ART

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the

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invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

- 12. Claims 1, 3, 5, 13, 15 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over <u>Applicant's Admit prior Art (AAPA)</u> in view of <u>Peters et al.</u> (US Patent 4,999,766).
- 13. As per claims 1 and 13, <u>AAPA</u> teaches a storage network system and a method, comprising:

a storage system (e.g. disk subsystem) (Specification, page 2, II. 9-10);

a storage controller (e.g. disk/RAID controller), wherein the storage controller provides access to the storage system (storage system comprising of two or more hard disks) (Specification, page 2, II. 10-12) and wherein the storage controller has a serial port for connection to an external device (e.g. laptop computer or maintenance device) (Specification, page 2, II. 14-15); and

the external device, electrically coupled to the storage controller through the serial port (Specification, page 2, II. 14-15), and a user initializing the serial port by selecting at least one serial port parameter value (e.g. baud rate) for a set of serial port parameters (e.g. baud rate, data bits, stop bits, parity and flow control) (Specification, page 2, I. 16 to page 3, I. 1).

AAPA does not teach the storage network system and the method for serial port initialization, comprising: receiving at least one serial port parameter value and initializing the serial port by using the received serial port parameter value selected by the user.

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Peters teaches a system and a method comprising:

providing a communication initialization menu to a user and the user selecting (e.g. selecting by typing and overriding) a specific communication parameter and initializing a communication line with the selected specific communication parameter (col. 1, l. 66 to col. 2, l. 13), wherein after receiving the specific communication parameter, the communication line and the corresponding ports would obviously operate accordingly.

<u>Peters</u> is analogous art because as <u>Peters</u>' communication initialization menu is reasonably pertinent to the particular problem with which the applicant was concerned, which is to enable a user to initialize a communication link with a peripheral.

It would have been obvious to one of ordinary skill in this art, at the time of invention was made to include <u>Peters</u>' communication initialization menu into <u>AAPA</u>'s storage network system. The resulting combination of the references further teaches the storage network system and the method for serial port initialization, comprising:

providing the communication initialization menu to the user, and the user selecting at least one serial port parameter value; and

after receiving the selected at least one serial port parameter value, the communication with the corresponding serial port would be initialized accordingly.

The suggestion/motivation for doing so would have been for the benefit of relieving the user of the burden of remembering all of the parameters for initializing a communication session (Peters, col. 2, II. 4-6).

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Therefore, it would have been obvious to combine <u>Peters</u> with <u>AAPA</u> for the benefit of relieving the user of the burden of remembering all of the parameters for initializing a communication session to obtain the invention as specified in claims 1 and 13.

14. As per claims 3 and 15, <u>AAPA</u> and <u>Peters</u> teach all the limitations of claims 1 and 13 as discussed above, where both further teach the storage network system and method, comprising:

a host device (e.g. laptop computer), electrically coupled to the storage controller (e.g. disk/RAID controller) (AAPA, Specification, page 2, II. 9-12),

wherein the storage controller receives the at least one serial port parameter value (e.g. baud rate) from the host device (<u>AAPA</u>, Specification, page 2, II. 15-18 and Peters, col. 2, II. 11-12).

15. As per claims 5 and 17, <u>AAPA</u> and <u>Peters</u> teach all the limitations of claims 1 and 13 as discussed above, where <u>AAPA</u> further teaches the storage network system and method, comprising wherein the set of serial port parameters includes at least one of a baud rate, a number of data bits, a number of stop bits, a parity and a flow control (<u>AAPA</u>, Specification, page 2, II. 17-18).

16. Claims 2 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over AAPA in view of Peters et al. (US Patent 4,999,766) as applied to claims 1 and 13 above, and further in view of Farrand et al. (US Patent 5,559,958).

AAPA and Peters teach all/the limitation of claims 1 and 13 as discussed above, wherein Peters further teaches presenting a boot menu (e.g. the communication initialization menu) to the user, wherein the boot menu enable the user to select the setting of a plurality of communication parameters (Peters, col. 1, I. 66 to col. 2, I. 13), but AAPA and Peters does not teach the storage network system and method, comprising:

wherein the boot menu includes an option for enabling a serial console mode;
receiving a first user selection to enable the serial console mode;
presenting the serial console mode menu to the user; and
receiving a second user selection of comprising at least one serial port parameter
value, wherein the second user selection is made using the serial console mode menu.

<u>Farrand</u> teaches a graphic user interface (GUI) for computer management system and method comprising:

displaying to a user a file server menu, wherein the file server menu includes a engineering server subsystem (Fig. 10);

receiving a user selection of the engineering server subsystem (Fig. 10-11); presenting the engineering server subsystem (Fig. 11);

receiving the user selectively depressing one of the engineering server subsystem button comprising a configuration subsystem button (Fig. 11, ref. 516), an

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input/output subsystem button (Fig. 11, ref. 528), a disk storage subsystem button (Fig. 2111, ref. 520) and a security configuration subsystem button (Fig. 11, ref. 518) (Fig. 11 and col. 197, II. 1-14).

<u>Farrand</u> is analogous art because <u>Farrand</u> is in the field of applicant's endeavor which is the communication between the disk storage system and the computer for managing by configuring the disk storage system.

It would have been obvious to one of ordinary skill in this art, at the time of invention was made to include <u>Farrand</u>'s GUI menu into <u>AAPA</u> and <u>Peters</u>' storage network system and method. The resulting combination of the references teaches the storage network system and method further comprising:

displaying to the user the communication initialization menu, wherein the communication initialization menu would obviously include the option for selection one of the plurality of communication parameters (e.g. baud rate);

receiving the first user selection to enable the menu for setting one of the plurality of communication parameters;

presenting the menu for one of the plurality of communication parameters (e.g. baud rate) to the user; and

receiving the second user selection of comprising the corresponding communication parameter value (e.g. entering the value for the baud rate), wherein the second user selection is made using the menu for one of the plurality of communication parameters.

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The suggestion/motivation for doing so would have been for the benefit of providing a GUI interface which enable the user/operator to easily select the available options/functions rather than requiring complex typing of commands to implement the desire functionalities.

Therefore, it would have been obvious to combine <u>Farrand</u> with <u>AAPA</u> and <u>Peters</u> for the benefit of providing a GUI interface which enable the user/operator to easily select the available options/functions rather than requiring complex typing of commands to implement the desire functionalities to obtain the invention as specified in claims 2 and 14.

17. Claims 4 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over AAPA in view of Peters et al. (US Patent 4,999,766) as applied to claims 3 and 15 above, and further in view of Harrington (US Patent 6,480,958).

AAPA and Peters teach all the limitation of claims 3 and 15 as discussed above, but AAPA and Peters does not expressly teach the storage network system and method, further comprising wherein the storage controller has a hard-coded password for authenticating an operator of the host device before receiving the at least one serial port parameter values from the host device.

<u>Harrington</u> teaches a system and a method comprising a user entering the information comprising a secret password and a personal user name or identification number and verifying the entered information is correct before granting access to the user (col. 1, II. 30-45).

<u>Harrington</u> is analogous art because <u>Harrington</u> is reasonably pertinent to the particular problem with which the applicant was concerned, providing a save mode of operation as the password is required before accessing.

It would have been obvious to one of ordinary skill in this art, at the time of invention was made to include <u>Harrington</u>'s entering and verification of the secret password and the personal user name or identification number into <u>AAPA</u> and <u>Peters'</u> storage network system and method. The resulting combination of the references teaches the storage network system and method further comprising the user/operator to enter the information comprising the secret password and the personal user name or identification number and verifying the entered information is correct before enabling the receiving of the start command send by the user/operator

The suggestion/motivation for doing so would have been for the benefit of providing security measures to ensure the receiving of the serial port parameter settings only from authorized user/operator (<u>Harrington</u>, col. 1, II. 30-33).

Therefore, it would have been obvious to combine <u>Harrington</u> with <u>AAPA</u> and <u>Peters</u> for the benefit of providing security measures to ensure the receiving of the serial port parameter settings only from authorized user/operator to obtain the invention as specified in claims 4 and 16.

Claims 6 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over AAPA in view of Peters et al. (US Patent 4,999,766) as applied to claims 1 and 13 above, and further in view of Walter et al. (US Patent 6,847,615).

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AAPA and Peters teach all the limitations of claims 1 and 13 as discussed above, where both further teach the storage network system and method, comprising:

wherein the set of serial port parameters includes baud rate (<u>Peters</u>, col. 2, II. 11-12);

the external device (e.g. laptop computer or maintenance device) connected to the storage controller (e.g. disk/RAID controller) through the serial port (Specification, page 2, II. 14-15); and

wherein the user sets the serial port baud rate by utilizing a break key sequence (AAPA, Specification, page 2, I. 28 to page 3, I. 1).

AAPA and Peters does not teach the storage network system and method, comprising wherein receiving at least one serial port parameter value includes the external device performing an adaptive baud rate negotiation between the storage controller and the external device.

Walter teaches a system and a method for baud rate detection for serial data comprising the negotiating the baud rate of the transferring data by utilizing the function of setting a receiving device (storage device) to a correct baud rate for receiving data (col. 2, II. 8-15), wherein the data received comprises of a predetermined data word, such as one of the character 'A' or 'a', and the next character in the serial data transmission may be 'T' or 't' (col. 2, II. 49-52 and col. 6, II. 43-49).

<u>Walter</u> is analogous art because then <u>Walter</u> is reasonably pertinent to the particular problem with which the applicant was concerned which determination of the baud rate for serial data transmission.

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It would have been obvious to one of ordinary skill in this art, at the time of invention was made to include <u>Walter</u>'s setting of correct baud rate into <u>AAPA</u> and <u>Peters</u>' storage device. The resulting combination of the references teaches the storage network system and method further comprising setting the correct baud rate by receiving data including the break sequence, therefore implementing the adaptive baud rate negotiation between the storage controller and the external device based on the received break key sequence.

The suggestion/motivation for doing so would have been for the benefit of providing the automatic determination of baud rate for the serial data transmission (Walter, Abstract and col. 2, II. 1-2).

Therefore, it would have been obvious to combine <u>Walter</u> with <u>AAPA</u> and <u>Peters</u> for the benefit of providing the automatic determination of baud rate for the serial data transmission to obtain the invention as specified in claims 6 and 18.

V. CLOSING COMMENTS

Conclusion

a. STATUS OF CLAIMS IN THE APPLICATION

The following is a summary of the treatment and status of all claims in the application as recommended by M.P.E.P. 707.07(i):

a(1) CLAIMS REJECTED IN THE APPLICATION

Per the instant office action, claims 1-20 have received a first action on the merits and are subject of a first action non-final.

b. DIRECTION OF FUTURE CORRESPONDENCES

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Chun-Kuan (Mike) Lee whose telephone number is (571) 272-0671. The examiner can normally be reached on 8AM to 5PM.

IMPORTANT NOTE

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Donald Sparks can be reached on (571) 272-4201. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

May 22, 2007

Chun-Kuan (Mike) Lee Examiner Art Unit 2181

DONALD SPARKS SUPERVISORY PATENT EXAMINER

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1. A method for serial port initialization in a storage controller, wherein the storage controller includes a serial port for connection to an external device, the method comprising:

receiving at least one serial port parameter value for a set of serial port

parameters, wherein the at lest one serial port parameter is selected by an user; and

initializing a serial port on the storage controller using the received serial port

parameter values.

2. The method of claim 1, wherein receiving at least one serial port parameter value includes:

presenting a boot menu to the user, wherein the boot menu includes an option for enabling a serial console mode;

receiving a first user selection to enable the serial console mode;

presenting the serial console mode menu to the user; and

receiving a second user selection of comprising at least one serial port parameter value, wherein the second user selection is made using the serial console mode menu.

3. The method of claim 1, wherein receiving at least one serial port parameter value includes:

establishing a connection between a host device and the storage controller; and receiving the at least one serial port parameter value from the host device.

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- 4. The method of claim 3, wherein receiving at least one serial port parameter value includes: authenticating an operator of the host device before receiving the at least one serial port parameter values from the host device.
- 5. The method of claim 1, wherein the set of serial port parameters includes at least one of a baud rate, a number of data bits, a number of stop bits, a parity, and a flow control.
- 6. The method of claim 1, wherein the set of serial port parameters includes baud rate and wherein receiving at least one serial port parameter value includes performing an adaptive baud rate negotiation between the storage controller and an external device connected to the storage controller through the serial port.
- 7. The method of claim 6, wherein performing an adaptive baud rate negotiation includes: sending a break key sequence from the external device to the storage controller; determining an amount of time between a start bit and a stop bit; and obtaining a baud rate based on the amount of time between the start bit and the stop bit.
- 8. The method of claim 7, wherein obtaining a baud rate based on the amount of time includes performing a look-up of the baud rate in a look-up table.

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9. A method of performing an adaptive baud rate negotiation for serial port initialization in a storage controller, wherein the storage controller includes a serial port for connection to an external device, the method comprising:

sending a break key sequence from the external device to the storage controller; determining an amount of time between a start bit and a stop bit; obtaining a baud rate based on the amount of time; and sending a second baud rate for the serial port based on the first baud rate.

- 10. The method of claim 9, wherein obtaining a baud rate based on the amount of time includes performing a look-up of the baud rate in a look-up table.
- 11. The method of claim 9, further comprising resending the break key sequence responsive to a timeout condition.
- 12. The method of claim 9, further comprising repeating the sending, determining, and obtaining steps until a timer expires.
 - 13. A storage network, comprising:
 - a storage system;

a storage controller, wherein the storage controller provides access to the storage system and wherein the storage controller has a serial port; and

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an external device, electrically coupled to the storage controller through the serial port,

wherein the storage controller receives at least one serial port parameter value for a set of serial port parameters and initializes the serial port using the received serial port parameter values, wherein the at least one serial port parameter is selectable by an operator.

- 14. The storage network of claim 13, wherein the storage controller receives the at least one serial port parameter value by presenting a boot menu, wherein the boot menu includes a serial console mode, receiving a user selection of a serial console mode, presenting the serial console mode, and receiving operator selection of at least one serial port parameter value in the serial console mode.
- 15. The storage network of claim 13, further comprising: a host device, electrically coupled to the storage controller, wherein the storage controller receives the at least one serial port parameter value from the host device.
- 16. The storage network of claim 15, wherein the storage controller has a hard-coded password for authenticating an operator of the host device before receiving the at least one serial port parameter values from the host device.

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17. The storage network of claim 13, wherein the set of serial port parameters includes at least one of a baud rate, a number of data bits, a number of stop bits, a parity, and a flow control.

- 18. The storage network of claim 13, wherein the set of serial port parameters includes baud rate and wherein the external device performs an adaptive baud rate negotiation between the storage controller and the external device.
- 19. The storage network of claim 18, wherein the external device performs an adaptive baud rate negotiation by sending a break key sequence from the external device to the storage controller, determining an amount of time between a start bit and a stop bit, and obtaining a baud rate based on the amount of time.
- 20. The storage network of claim 19, wherein the external device obtains a baud rate based on the amount of time by performing a look-up of the baud rate in a look-up table.